

Akron Engineering Bureau

2006 Annual Report



City of Akron Department of Public Service

Donald L. Plusquellic
Mayor

Gerald Holland
Service Director

David J. Celik, P.E.
City Engineer

Vision
City Engineer
Design Division
Environmental Division
Construction Division
Administrative Services
Revenue/Expenditures

To: Our Customers
From: David J. Celik, P.E.
City Engineer
Date: June 15, 2007
Re: Akron Engineering Bureau, 2006



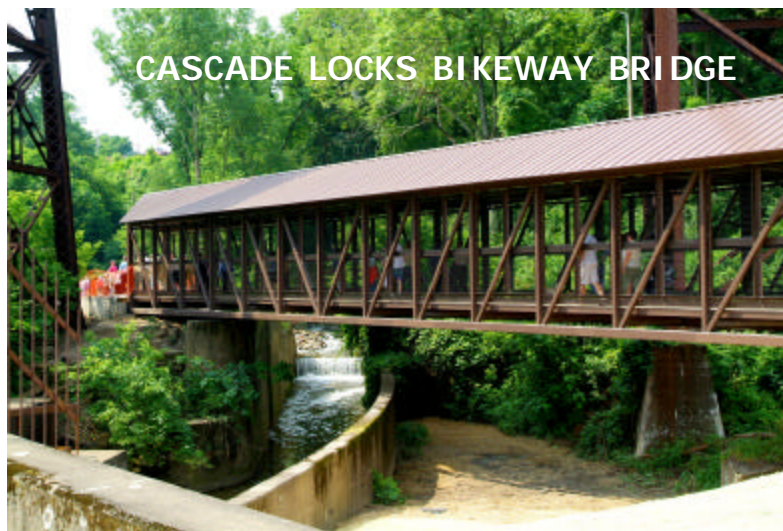
Enclosed for your review and consideration is the 2006 Akron Engineering Bureau Annual Report.

2006 was another successful and productive year for the Engineering Bureau. Generally, we met our goals for 2006. We began planning for implementation of several technology initiatives, including GIS and an Electronic Document Management System. We continue to work with outside agencies and other governmental units that have common interests, especially related to storm water issues. We also continued our emphasis on training. This has become even more important with the requirement for our Professional Engineers and Surveyors to earn Professional Development Hours as required by the State of Ohio. Cross training is still a priority for us to enhance technical skills and maintain a flexible work force.

In 2006, the Engineering Bureau was successful in attracting outside funds for projects. We received federal funds of over \$8 million from AMATS for transportation projects and we submitted successful Ohio Public Works Commission applications for 4 public improvement projects throughout the City. We also assisted in a successful application for Ohio Job Ready site funds for the White Pond area in the amount of \$1.7 million.

We assisted the Public Utilities Bureau in developing comments for the Water Pollution Control Station National Pollutant Discharge Elimination System permit submitted to the City by the Ohio EPA. We anticipate the final permit being negotiated this year. Another permit we assisted in obtaining is the Storm Water Management Plan (SWMP). The Plan was developed per the requirements of the City's re-issued National Pollutant Elimination System (NPDES) permit for storm water and includes complete and updated versions of the original plan including, but not limited to, a construction program, post construction program, public education and outreach, and public involvement.

2006 was a productive year with the Capital Budget. We bid almost \$20 million worth of projects and processed almost \$32.5 million in contractor and consultant payments. Some of the notable projects include: completion of the CSO Rack 40/31 project, Highland Square Business District improvements, Cascade Locks Bikeway Phase IIA, two JEDD projects; the Cleveland-Massillon Road and Copley Meadows Pump Stations and the Howard-Ridge-High Street improvements that support the Northside residential development. In addition to these and other projects in the Capital Budget, we administered 8 emergency projects.



AEB VISION



Akron Engineering Bureau (AEB) Vision 2002

Our vision is to provide professional engineering services that meet the infrastructure needs of our customers by:

- Planning projects that meet the goals of the City.
- Designing projects in a cost effective manner.
- Constructing projects in compliance with the contract documents.

To reach this vision means:

- Utilizing the experience, education and training of our employees to create a more flexible work force.
- Empowering our employees to manage projects more independently.
- Use of innovative plan development, design and construction techniques to minimize project costs.
- Maintaining the highest level of ethics and professionalism.

Long Term Vision Affirmation

We will affirm and re-enforce our vision by operating the AEB with the following philosophy:

Reduce the need for supervision by creating additional Engineering Technician III and Civil Engineer III promotional opportunities, and filling those positions with capable and motivated employees who can independently coordinate all aspects of a project.

Assign employees based on:

- The overall needs of the AEB.
- The experience level necessary to administer the specific project.
- The opportunity to diversify the experience of the workforce.
- The expectation of minimizing project costs.

Rotate employees between the Design/Environmental Division and the Construction Division so that all employees become proficient in both project design and construction administration.

Maintain the proper balance between in-house design and consultant design.

Determine and monitor overhead rates including project development and programming costs in order to fully understand the cost-effectiveness of the AEB.

Administrative Services

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kostuke@ci.akron.oh.us

Construction Division

James P. Weber PE
(330) 375-2740 Fax (330) 375-2344
weberji@ci.akron.oh.us



City Engineer

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Department of Public Service
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Design Division

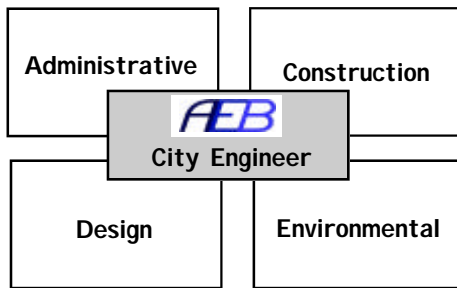
Michael L. Madonio PE
(330) 375-2160 Fax (330) 375-2353
madonmi@ci.akron.oh.us

Environmental Division

Patrick D. Gsellman PE
(330) 375-2357 Fax (330) 375-2288
gsellpa@ci.akron.oh.us



CSO Rack 40



City Engineer

Core Functions

The Akron Engineering Bureau is responsible for the planning, design and construction of the public improvement projects of the City of Akron. Our goal is to produce high quality projects on schedule and within budget. The Akron Engineering Bureau provides an opportunity for a wide variety and diverse experience in the design and construction of civil engineering and public works infrastructure projects. In 2006, the Akron Engineering Bureau awarded \$ 20 million worth of public improvement projects. The Bureau also paid out \$32.5 million in construction and consultant payments during the year. The types of projects include: street and sidewalk reconstruction; bridge maintenance and reconstruction; parks, playgrounds and athletic fields; building construction and rehabilitation; and public utilities (water, storm and sanitary sewer system improvements).

Our employees are expected to maintain cooperative working relationships with the public, City Council, the Administration, other City divisions, consulting engineering firms, utility company representatives, contractors, developers, suppliers and federal, state and municipal agencies. While accomplishing our mission, we are expected to maintain the highest level of ethics and professionalism.

The Akron Engineering Bureau is divided into four divisions: Design, Environmental, Construction and Administrative Services. The major activities of each division are listed below.

DESIGN DIVISION

- Programming/Budgeting
- Detail Design
- Project Management
- Public Involvement
- Transportation Program
- Consultant Contract Administration
- Standards and Specifications
- Plan Review
- Surveying
- Mapping
- Subdivision and Plan Review
- Private Development Agreements
- Computer Hardware and Software Support

ENVIRONMENTAL DIVISION

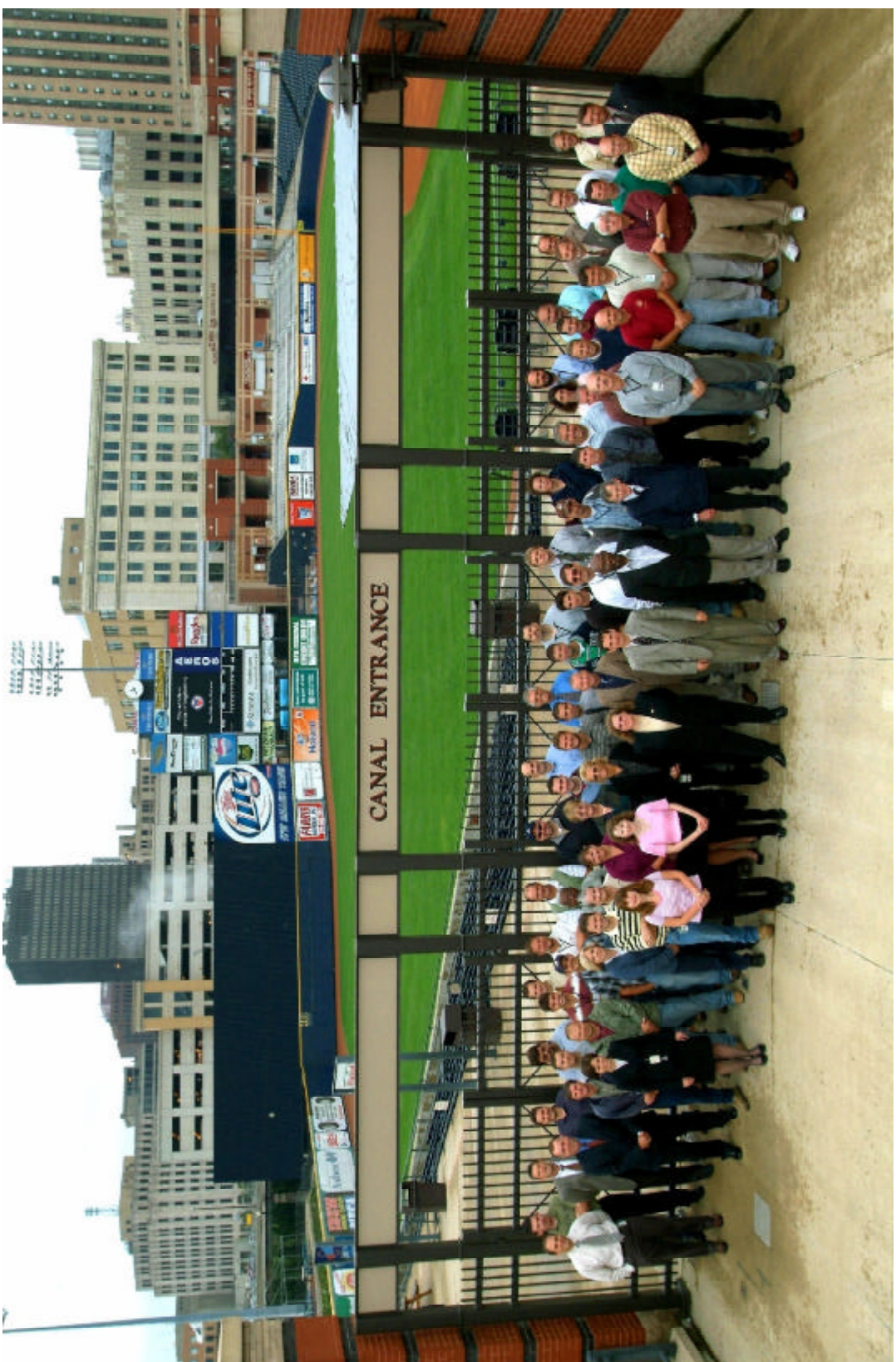
- Detailed Design
- Project Management
- Plan Review
- Storm Water Management
- Sanitary Sewer Evaluation Studies
- Water Pollution Control Station
- Hardy Road Landfill
- Joint Economic Development Districts (JEDD)
- Slope Stability/Erosion Control
- Brownfields
- Facilities Planning / CSO

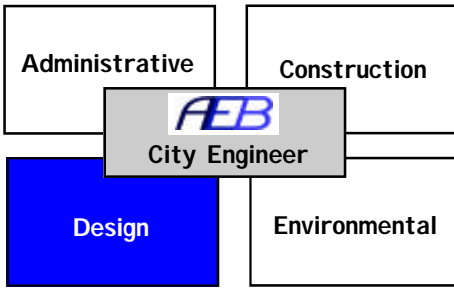
CONSTRUCTION DIVISION

- Construction Project Administration
- Plan Review
- Materials Testing Laboratory
- Bridge Inspection and Inventory
- Public Involvement

ADMINISTRATIVE SERVICES DIVISION

- Files
- Legislation
- Contract Preparation
- Street Improvement and Street Dedication
 - Petition Program
- Underground Records and Central Records
- Service Counter
- Secretarial Staff
- Developer Assistance and Coordination
- Computer Mapping
- Resolving Legal Claims





Design Division



Core Functions

Programming/Budgeting
 Detail Design
 Project Management
 Public Involvement
 Transportation Program
 Consultant Contract Administration
 Standards and Specifications
 Plan Review
 Surveying
 Mapping

Subdivision and Plan Review



Jim Anderson Wayne Bachus Travis Capper Jeff Caston Andrew Davis Michelle DiFiore Rick Fischer
 Alicia Garnett Bob Geiser Jason Harris Dennis Hawthorne Christine Jonke Randy Keirns Mike Madonio
 Bill Marras Beth Mettle Jeff Miller Dianne Reed Phil Rohr Chad Root Rob Scarletelli
 A.J. Smith Adam Staller Sanford Taylor Michael Teodecki Don Vardon Jim Vechery David Wilkerson

2006 Goals

Update the Design Manual.

Provide Training for our project managers to track consultant payments for specific contract tasks through the use of a spreadsheet.

Establish a method for tracking suggested revisions to the Construction and Materials Spec Book for the next time it is printed.

Major Accomplishments

Submitted successful Ohio Public Works Commission applications for public improvement projects throughout the city. These included the following projects: North Portage Path (Barcelona Drive to Mark Drive), North Street, West Market Street (Rose Boulevard to Portage Path), Tallmadge Avenue Widening (SR 8 to Home Avenue)

Received federal funds of more than \$8 Million from successful applications submitted to AMATS for the following projects: West Market Street (Hawkins Avenue to Twin Oaks), Darrow Road Signals, Towpath Trail (AES to Bartges), South Main Street (Waterloo Road to Firestone Boulevard)

Completed plans for the demolition of the Landmark Garage on Bowery Street. Demolition of the structure was completed in early 2007.

Completed plans for three phases of public improvements in support of business expansions in the Highland Square Neighborhood Business District. Construction occurred in 2006 and will be completed in 2007.

Completed plans for several projects at the Stubbs Justice Center including the Stubbs Justice Center Air Conditioning, Stubbs Justice Center Alarm System, and Stubbs Justice Center Garage Repairs.

Completed plans for full improvements to Howard Street from Lods Street to Cuyahoga Falls Avenue. Construction is scheduled to start in June 2007.

Completed plans for two improvements along West Market Street from Pershing Avenue to Hawkins Avenue that include roadway improvements and relocation of overhead utilities to underground. These improvements will cost an estimated \$4.5 million. Construction of the utility relocation is scheduled to begin in early 2007.

Completed plans for public improvements to support the redevelopment of the Elizabeth Park Hope VI housing project. Construction of the Elizabeth Park Hope VI Public Improvements Phase 2 will begin in 2007. In addition, completed plans for the relocation of Elizabeth Park Courts also in support of the Hope VI project. Construction for the court relocation will occur in 2007.

Completed plans for Kenmore Boulevard from 11th Street SW to 20th Street SW, the 5th and final phase of the Kenmore II Neighborhood Development Area. Construction will occur in 2007.

Completed plans for the Main Street Building Renovation to perform abatement and clean-up of buildings along South Main Street for redevelopment purposes. Construction will begin in early 2007.

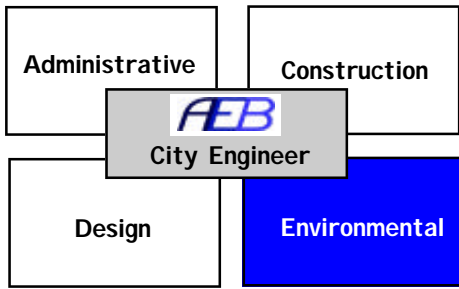
Completed plans for the extension of the Towpath Trail Bikeway from the Innerbelt to the intersection of Quaker Street and Ash Street. Known as Cascade Locks Bikeway, Phase IIA, construction will occur in 2007.

Training

Advanced Geosynthetics Applications
Lime Stabilization Techniques
Impact Attenuators
Asphalt Pavement Materials
Tracking Consultant Invoices
Concrete Pipe & Box Design
Soil Nailing
Wetlands and Regulations
Ohio Transportation Engineering Conference

City's Employment Requisition/Certification Process
Guardrail Basics
AMATS Safety Workshop
ODOT DBE Training
New Phase I ESA Regulations
Road Safety Web-Cast from APWA
Fiber Optic Web-Cast from APWA
Tunnels
Using Land Desktop

City's Testing Process
Civil Service Rules
Basic CAD Training
Business Writing
AutoCAD Upgrade Training
EEO



Environmental Division



Core Functions

Detailed Design
 Project Management
 Developer Assistance, Coordination
 and Plan Review
 Storm Water Management
 Sanitary Sewer Evaluation Studies
 Water Pollution Control Station
 Joint Economic Development Dis-
 tricts (JEDD)
 Slope Stability/Erosion Control
 Brownfields
 Facilities Planning

Combined Sewer Overflows (CSO)
 GIS
 Industrial Park Site Development



Brad Beckert Scott Davenport Patrick Gsellman
 Genny Hanna Tish Jernigan Mark Pirie Jeff VanNatten

2006 Goals

Fully utilize Microsoft Office Project for all Environmental Division projects in 2006. This includes planning, resource loading, scheduling, and tracking. Microsoft Office Visio will be used to develop project flow charting.

As a continuation of a 2005 goal, the Environmental Division will expand its participation in area-wide watershed project in the Cuyahoga River watershed and Tuscarawas River watershed. At a minimum, participation will include the following watershed activities:

- Three County MetroParks Activities (2005 goal)
- Summit County PIPE NPDES Storm Water
- Brecksville Dam Removal
- Tusc. River Storm Water Team
- Cuyahoga Valley Communities Council (CVCC)

Develop a centralized consultant file for the Environmental Division that includes brochures, case studies, articles, newsletters consultant and project letters of interest.

Major Accomplishments

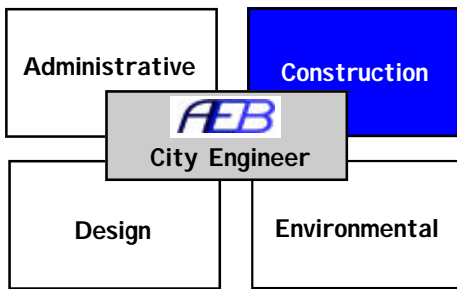
The following is a summary of key accomplishments of the Environmental Division that occurred in 2006.

- Prepared successful Clean Ohio Assessment Fund Cleanup grant application for the Middlebury East project. (\$750,000 grant)
- Completed plans and bid Killian Rd Conlin Rd Water JEDD project.
- Prepared and submitted Storm Water Management Plan document to OEPA for review and approval.
- Completed plans and bid Copley Meadows Pump Station
- Prepared successful Ohio Job Ready Sites grant application for White Pond Office Park (\$1,700,000)

Training

- | | | |
|---|--|---|
| <ul style="list-style-type: none">• Design Division Monthly Training – Advanced Geosynthetic Applications, Educational Session on Lime Treated Soil, Forgiving Highways, Soil Nails & Mitigating Shallow Landslides with Launched Soil Nails, Sierra Scape Retaining Wall System• CSO Tunnel Storage and Conveyance Seminar• Floyd Browne Group Seminars – Problems to Solutions: Pumps and Pump Stations, New Phase I Environmental Site Assessment Regulations, Rehabilitation of Wastewater Manholes | <ul style="list-style-type: none">• and Structures• Webcasts – Understanding the Peak Wet Weather Flow Management Policy, Surviving in a Political Environment, Controlling Construction Site Run-off• Stream Investigation, Stabilization, and Design Workshop• FMLA Computer Training• Tunneling Project Tour, Columbus, Ohio• Survey Ethics and Standards• Tunnel Symposium• Road Safety Web-Cast from APWA• Fiber Optic Web-Cast from APWA | <ul style="list-style-type: none">• Asphalt Pavement Materials• Arbitration Dispute Resolution Complex Case Analysis• AutoCADD, AutoDesk Training• Construction RPR Seminar• Project Management Seminar• GIS Addressing System |
|---|--|---|





Construction Division



Core Functions

Construction Project Administration
Plan Review
Materials Testing Laboratory
Bridge Inspection and Inventory
Public Involvement



Juan Pablo Ascarrunz Mike Brehob Dave Cooke T. Scott Davenport Karen Dyer Rick Falkenstein Fred Fassnacht
Bill Hahn Jim Hall Jason Harris Chuck Hirsch Mike Huber Kerry Jones Jason Kline Chad Kobelt Richard Kovach
Bill Magyar Jon Malish Paul McCutcheon Jeff Miller Cory Moke Mark Moore Larry Peaslee Barry Pruitt
Jody Richards Adam Staller Bill Stump Mike Watt Jim Weber David Wright MikeWytrzyaszczewski Jason Zajac

2006 Goals

- Update the Resident Project Representative Source Book by March 31, 2006.
- Conduct the Resident Project Representative seminar by March 31, 2006.
- Continue to monitor Gypsy Moth infestation and work with the Ohio Department of Agriculture to have the highest levels treated by June 15, 2006.
- Bid and complete the White Pond Drive Gateway planting by September 30, 2006, pending approval of the beautification grants from ODOT.
- Coordinate the completion of the Charles Goodyear Park rehabilitation with Downtown Akron Partnership and Keep Akron Beautiful by June 30, 2006.
- Complete the update to the landscape sections of the Construction and Materials Specifications and write addenda by December 31, 2006.

Major Accomplishments

Transportation

ADA Access
Bridge Painting 2006
Citywide Sidewalks 2006
Howard/Ridge/High Streets

Facilities

Communication Building Repair
Cedar/High Parking Lot
Beech Street Power Plant Site Work
Brown/Graves Underground Storage Tanks
Canton Road NBD Retaining Wall
Incubator Renovation
S. Main Street Parking Lots
Stubbs Roof Replacement
Superblock Parking Deck Repairs

Parks and Recreation

Joy Park Pavilion
Schneider Park Storm Drainage

Utilities

St. Michaels Pump Station Repairs

Emergency Contracts

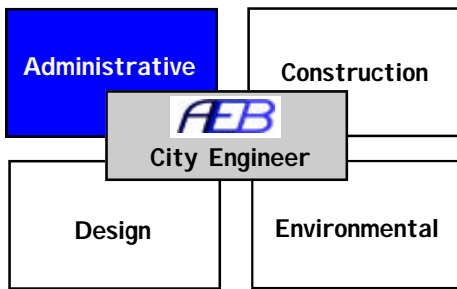
Bath Hills-Woodbury Storm Sewer
Brown-Graves Lumber Demolition
Hampton Knoll Drive
North Street Retaining Wall
Stubbs Justice Center Façade
Taylor Pontiac Demolition
Vernon Odom Boulevard Water Line
Wall Street Sanitary Sewer

Training

American Concrete Institute Certification	Prevailing Wage
Asphalt Field Quality Control	Resident Project Representative Seminar
Bridge Maintenance	School Construction
Ohio Transportation and Engineering Conference	Troubleshooting Concrete Construction Tunnel Construction



Warm Mix Asphalt



Administrative Services Division



Core Functions

Legislation
 Contract Preparation
 Sidewalk Petition Program
 Street Improvement Petitions
 Street Dedication Petitions
 Private Development Agreements
 Underground Records
 Central Records Files
 Service Counter
 Secretarial Staff
 Computer Mapping/GIS
 Resolving Legal Claims



Beverly Carlson Wendy Doyle Linda Fallon Chuck Hirsch Brent Kelley Kenneth Kostura
 Marianne Kracker Michele Mann

2006 Goals

Update the sewer underground record maps with as-built project information. All new as-built information will be added as it becomes available. The information from 20 backlogged projects will be added by December 31, 2006.

Identify and purge obsolete records from the records archive in accordance with the Records Retention Policy.

Submit an updated records retention schedule for approval by the Records Commission by June 30, 2006.

Update the clerical procedure write-ups and consolidate them into a manual by June 30, 2006.

Training

AutoCAD 2006 Training
City Employment/Requisition
Civil Service Rules and Testing Seminars
COMPUSA - Excel 2003 Introduction
COMPUSA - Excel Intermediate
FMLA Computer Based Training
Injury & Illness Recordkeeping Training
ODOT A-87 Cost Allocation Policies
ODOT DBE Training
ODOT LPA seminar
LECET Prevailing Wage Seminar
Proofreading Seminar

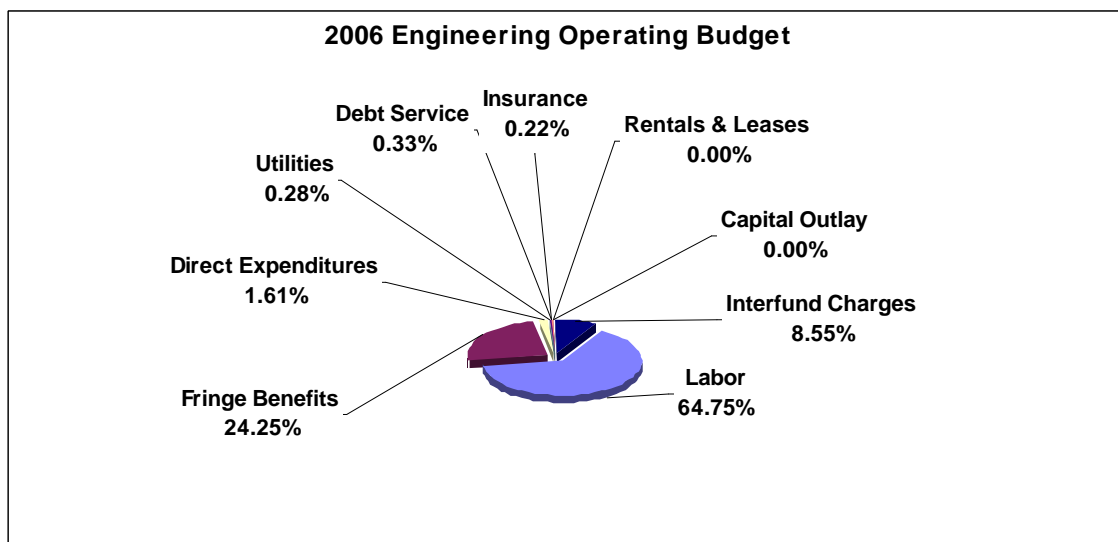
Safety Consultant
Construction Inspection Seminar
RPR Seminar 2006
Fiber Optic Infrastructure
Neighborhood Makeovers
Target Road Safety
Post Construction Stormwater Management/
Best Management Practices
Mistake-Free Grammar and Proofreading
Employee Assistance Program Training
Surviving in a Political Environment
Designing Bicycle Facilities

Service Levels

In 2006 the Engineering Bureau processed 174 contractor invoices for \$26.7 million, and 524 consulting invoices for \$5.8 million, totaling \$32.5 million.

The Engineering Bureau awarded and administered 54 construction contracts with 30 different contractors for a total of over \$17.8 million in 2006.

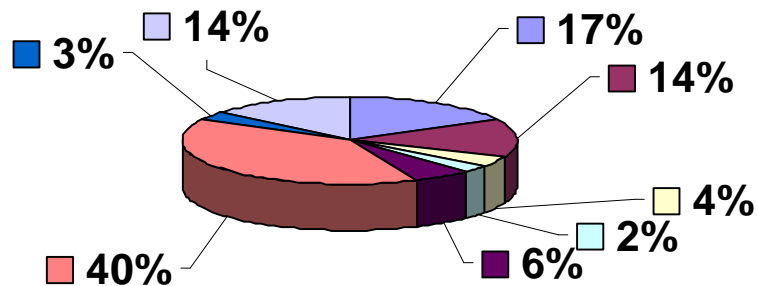
The Engineering Bureau attended 24 public meetings to inform the public about City projects and procedures.



2006 Capital Budget

2006 Sources of Revenue

- Income Tax
- General Obligation Debt
- Sewer Capital Fund
- Water Capital Fund
- Community Development
- Federal & State Transportation Funds
- Ohio Public Works Commission Funds
- Other



2006 Program Expenditures

- Public Utilities
- Transportation
- Economic Development
- Debt Service
- Housing & Human Resources
- Public Facilities
- Parks & Recreation
- Other

